# Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, Kentucky 40601

(502) 564-3999

**Final** 

### AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: KWVGC Gas - Dwale

Mailing Address: 748 North Lake Drive, Prestonburg, KY 41653

**Source Name:** Equitable Production Company

**Mailing Address:** 126 Monument Drive

Dwale, Floyd, KY -41621

Source Location: Zone 17, Lat. 37 13' 30"; Long. 82 43' 23"

Permit: V-08-015 Agency Interest: 44058

Activity: APE20080002

**Review Type:** Title V, Construction / Operating

Source ID: 21-071-00138

**Regional Office:** Hazard Regional Office

233 Birch Street, Suite 2

Hazard, KY 41701 (606) 435-6022

County: Floyd

**Application** 

Complete Date: April 22, 2008

Issuance Date: September 26, 2008

**Revision Date:** N/A

**Expiration Date:** September 26, 2013

John S. Lyons, Director Division for Air Quality

Revised 05/07/07

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	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
G-04-001 R1	General permit	APE20070001	06/26/2006	05/27/2005	General permit for KYWV Gas
X7 00 01 5		4 DE 2000000	0.4/2.4/2000	00/25/2000	0 110
V-08-015	Initial	APE20080002	04/24/2008	09/25/2008	Initial permit with
	permit				modifications to the facility

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#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

#### EG01 (U01 and 02) 4-Cycle Lean Burn Natural Gas Fired Reciprocating Compressor

#### **Emission Group Description**

This emission group includes two natural gas-fired stationary reciprocating internal combustion engines, each installed in 1968 and having a maximum power output capacity of 2,000 horsepower (hp).

#### **APPLICABLE REGULATIONS:**

▲ 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, applies to these units but pursuant to 40 CFR 63.6590(b)(3), being existing four stroke lean burn stationary RICE located at an area source, do not have to meet the requirements of NESHAP Subparts ZZZZ and A. No initial notification is necessary.

#### STATE ONLY APPLICABLE REGULATIONS:

▲ 401 KAR 63:020, Potentially hazardous matter or toxic substances.

#### NON-APPLICABLE REGULATIONS:

- ▲ 40 CFR 64, Compliance Assurance Monitoring, does not apply to the two compressors because these units are not subject to an emission limitation for NO<sub>X</sub>.
- ▲ 40 CFR 60 Subpart IIII, NSPS for Stationary Compression Ignition Internal Combustion Engines, does not apply to these units because these two compressor engines were installed in 1968, which is before the applicability dates for this rule.
- ▲ 40 CFR 60 Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines, does not apply to these units because these two compressor engines were installed in 1968, which is before the applicability dates for this rule.
- ▲ 401 KAR 51:150, NO<sub>X</sub> Requirements for Stationary Internal Combustion Engines, does not apply to these units because these two compressor engines are not identified as large NO<sub>X</sub> SIP call engines in the NO<sub>X</sub> SIP call engine inventory and are not subject to NO<sub>X</sub> control under a compliance plan pursuant to this rule.

#### 1. **Operating Limitations:**

Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities.

#### **Compliance Demonstration Method:**

For compliance demonstration, refer to Section F (requirement 7) for any malfunctions while operating the unit. Compliance with 401 KAR 63:020 is demonstrated while burning natural gas at the designed maximum capacity of the unit. If the unit is modified, modeling of air toxics may be required.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>:

- a. Refer to Section D for source-wide HAP emission limitations and compliance demonstration methodology.
- b. Pursuant to 401 KAR 63:020, the permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

- Compliance with 401 KAR 63:020 is demonstrated while burning natural gas at the designed maximum capacity of the unit. For compliance with 401 KAR 63:020, if the source alters process rates or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with information that shows that the facility will remain in compliance with 401 KAR 63:020.
- Refer to Section **D.4**, Source Emission Limitations and Testing Requirements.

#### 3. <u>Testing Requirements:</u>

Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

#### 4. **Specific Monitoring Requirements:**

Refer to Section F - Monitoring, Recordkeeping and Reporting Requirements.

#### 5. Specific Recordkeeping Requirements:

Refer to Section F - Monitoring, Recordkeeping and Reporting Requirements.

#### 6. **Specific Reporting Requirements:**

Refer to Section F - Monitoring, Recordkeeping and Reporting Requirements.

#### 7. Specific Control Equipment Operating Conditions:

None

#### 8. Alternate Operating Scenarios:

None

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EG02 (U03 and U04) One TulPro Triethylene Glycol (TEG) Dehydration Unit (U03), Reboiler (U04), and Flare

#### **Emission Group Description**

This emission group includes one TulPro dehydration unit, installed in 1994 and having a maximum natural gas flowrate of 26 mmscf/day. The emissions from the dehydration unit are controlled by a flare. The dehydration unit is also associated with a natural gas-fired reboiler, having a maximum heat input capacity of 1.25 mmBtu/hr.

#### **APPLICABLE REGULATIONS:**

- ▲ 401 KAR 59:015, New Indirect Heat Exchangers, is applicable to the natural gas-fired reboiler.
- ▲ 401 KAR 63:015, Flares, is applicable to the flare controlling emissions from the dehydration unit
- ▲ 40 CFR 63 Subpart HH, National Emission Standards for Hazardous Air Pollutants for Oil and Gas Production Facilities, is applicable to the dehydration unit.

#### **NON-APPLICABLE REGULATIONS:**

- ▲ 40 CFR 64, Compliance Assurance Monitoring, does not apply to the dehydration unit because this unit is not subject to an emission limitation for VOC.
- ▲ 40 CFR 63 Subpart HHH, (63.1270)National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities, does not apply because the facility is a minor source of HAPs as determined by the use of the facility's design natural gas throughput of 26 mmscf/day, to estimate maximum potential emissions under flare control of 95%.

#### 1. Operating Limitations:

In order to demonstrate compliance with Condition **D.3.**, the permittee shall control emissions from the dehydration unit using the flare at all times and the flare shall be operated at all times when emissions are vented to it.

#### **Compliance Demonstration Method:**

For compliance demonstration, refer to Section F (requirement 7) for any malfunctions while operating the unit.

#### 2. Emission Limitations:

a. Refer to Section D for source-wide HAP emission limitations and compliance demonstration methodology.

#### **Compliance Demonstration Method:**

Refer to Section **D.4**, Source Emission Limitations and Testing Requirements.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 59:015 Section 4(1)(a), the particulate matter (PM) emissions from the reboiler (U04) shall not exceed 0.56 lb/mmBtu.
- c. Pursuant to 401 KAR 59:015 Section 5(1)(a), the sulfur dioxide (SO<sub>2</sub>) emissions from the reboiler (U04) shall not exceed 3.0 lb/mmBtu.
- d. Pursuant to 401 KAR 59:015 Section 4(2), the opacity of visible emissions from the reboiler shall not exceed 20%. A maximum of 40% opacity shall be permissible for not more than 6 consecutive minutes in any 60 consecutive minutes during cleaning the fire box or blowing soot.

#### **Compliance Demonstration Method:**

The permittee shall be in compliance with the PM, SO<sub>2</sub> and opacity limit at all times while burning only natural gas.

e. Pursuant to 401 KAR 63:015 Section 3, the permittee shall not cause, suffer, or allow the emission into the open air of particulate matter from the flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day.

#### **Compliance Demonstration Method:**

Refer to Condition **4.a.** Specific Monitoring Requirements.

f. Pursuant to 40 CFR 63.764(e), the permittee shall be exempt from the requirements of 40 CFR 63.764(c)(1) and (d) since the actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere shall be maintained at less than 0.90 megagrams per year (or 0.99 tons per year).

#### **Compliance Demonstration Method:**

- Pursuant to 40 CFR 63.772(b)(2), the permittee shall determine the actual average benzene emissions from the dehydration unit using the following procedures. Note that emissions shall be determined with flare in place because Condition 1.a. requires emissions from the dehydration unit to be controlled by flare at all times.
- Pursuant to 40 CFR 63.772(b)(2)(i), the permittee shall determine actual average benzene emissions using the model GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc<sup>TM</sup> Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI–95/0368.1)
- Refer to Condition **5.c.** Specific Recordkeeping Requirements.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements:</u>

- Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.
- Refer to **4.a** Specific Monitoring Requirements.
- The permittee shall use methods referenced in 40 CFR 60.18 or methods approved by the Division, to determine the maximum velocity (dscf/s) and the maximum net heating value of the gas being combusted in the flare (Btu/dscf). The testing shall be performed annually and started within 180 days of issuance of the final permit V-08-015

#### 4. **Specific Monitoring Requirements:**

- a. In order to demonstrate compliance with Condition **2.e.**, the permittee shall conduct visual observations of the flare on a weekly basis and keep records in accordance with Condition **5.a.** below. If visible emissions are observed, the permittee shall arrange to have an EPA Reference Method 9 test performed to read the opacity and keep records of the test results. Immediate repairs shall be made to correct obvious failures or deficiencies. [401 KAR 52:030, Section 10]
- b. The permittee shall install and maintain a thermocouple or any other equivalent device to monitor the presence of a pilot flame in the flare. [401 KAR 52:030, Section 10]

#### 5. Specific Recordkeeping Requirements:

- a. A weekly (calendar week) log of the visible emissions check shall be kept along with records of any Method 9 testing performed for the flare.
- b. In order to demonstrate compliance with Conditions **2.f.** and pursuant to 40 CFR 63.774(d)(1)(ii), the permittee shall keep records of the actual average benzene emissions calculations (in terms of benzene emissions per year) as determined using GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher.
- c. The permittee shall keep record and supply such to the Division upon request of all equipment inspections and any maintenance, inspection, calibration and/or replacement of such equipment required by Subsection 4, *Specific Monitoring Requirements*.
- d. Refer to Section F.2.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, 8 and 9.

### 7. **Specific Control Equipment Operating Conditions:**

The permitte shall maintain the presence of a pilot flame in the flare, when the flare is in operation (emission sent to the flare).

### 8. <u>Alternate Operating Scenarios:</u>

None

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EG03 (U05, U06, and U07) One Temporary Compressor (U05), Triethylene Glycol (TEG) Dehydration Unit (U06), and Reboiler (U07)

#### **Emission Group Description**

This emission group includes one temporary natural gas-fired stationary reciprocating internal combustion engine and one temporary dehydration unit having a maximum natural gas flowrate of 10 mmscf/day. The dehydration unit is also associated with a temporary natural gas-fired reboiler, having a maximum heat input capacity of 0.275 mmBtu/hr. These units will be installed in June 2008. Note that these units will only be in operation during the temporary period of 945 hours specified in operating limitations below.

#### **APPLICABLE REGULATIONS:**

- ▲ 40 CFR 63 Subpart HH, National Emission Standards for Hazardous Air Pollutants for Oil and Gas Production Facilities, is applicable to the dehydration unit.
- ▲ 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, does apply to the temporary compressor. Pursuant to 40 CFR 63.6590(a)(2)(iii), the regulation applies to the new unit U05 since it will be installed after June 12, 2006. However, there are no applicable requirements for the MACT for the area source.

#### **NON-APPLICABLE REGULATIONS:**

- ▲ 40 CFR 64, Compliance Assurance Monitoring, does not apply to the temporary units because the potential emissions from each unit are less than major source thresholds.
- ▲ 40 CFR 60 Subpart IIII, NSPS for Stationary Compression Ignition Internal Combustion Engines, does not apply to the temporary compressor because the engine was originally manufactured in 1999, is not a compression ignition internal combustion engine, and will not be modified or reconstructed during the temporary operating period.
- ▲ 40 CFR 60 Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines, does not apply to the temporary compressor because the engine was originally manufactured in 1999 and will not be modified or reconstructed during the temporary operating period.
- ▲ 40 CFR 63 Subpart HHH, National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities, does not apply because the facility is a minor source of HAPs.
- ▲ 401 KAR 59:015, New Indirect Heat Exchangers, is not applicable to the temporary natural gas-fired reboiler because the maximum heat input capacity of the reboiler is less than 1 mmBtu/hr.
- ▲ 401 KAR 51:017, Prevention of Significant Deterioration, is not applicable to this temporary modification due to acceptance of an operating limitation.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 1. **Operating Limitations:**

Refer to compliance demonstration method for Condition 2.c. Emission Limitations.

#### 2. <u>Emission Limitations</u>:

- a. Refer to Section D for source-wide HAP emission limitations and compliance demonstration methodology.
- b. Pursuant to 40 CFR 63.764(e), the permittee shall be exempt from the requirements of 40 CFR 63.764(c)(1) and (d) since the actual average emissions of benzene from the temporary dehydration unit process vent to the atmosphere shall be less than 0.90 megagram per year (or 0.99 tpy).

#### **Compliance Demonstration Method:**

- Pursuant to 40 CFR 63.772(b)(2), the permittee shall determine the actual average benzene emissions from the temporary dehydration unit using the following procedures. Note that the actual emissions shall be determined for the temporary operating period for the dehydration unit.
- Pursuant to 40 CFR 63.772(b)(2)(i), the permittee shall determine actual average benzene emissions using the model GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc<sup>TM</sup> Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI–95/0368.1)
- Refer to Condition **5.d.** Specific Recordkeeping Requirements.
- c. In order to preclude the applicability of 401 KAR 51:017 for a significant emissions increase, the emissions of either VOC or NO<sub>x</sub> from the temporary compressor (U05), triethylene glycol (TEG) dehydration unit (U06), and reboiler (U07) shall be less than 40 tons per rolling 12 month period.

#### **Compliance Demonstration Method:**

The permittee shall operate the temporary compressor (U05), triethylene glycol (TEG) dehydration unit (U06), and reboiler (U07) for no more than 945 hours. Refer to Conditions **4.a.** Specific Monitoring Requirements, **5.a.** Specific Recordkeeping Requirements, and **6.a.** Specific Reporting Requirements.

#### 3. Testing Requirements:

Pursuant to 410 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 4. **Specific Monitoring Requirements:**

- a. In order to demonstrate compliance with Condition **2.c.**, the permittee shall monitor the actual operating hours on a weekly basis for the temporary units.
- b. In order to demonstrate compliance with Conditions **2.a.**, the permittee shall monitor the average natural gas flowrate to the temporary dehydration unit (U06) on a daily basis.

#### 5. **Specific Recordkeeping Requirements:**

- a. In order to demonstrate compliance with Condition 2.c., the permittee shall keep weekly records of the actual operating hours for the temporary units.
- b. In order to demonstrate compliance with Condition **2.a.**, a log of the daily average natural gas flowrate readings for the temporary dehydration unit (U06) shall be kept.
- c. In order to demonstrate compliance with Conditions **2.b.** and pursuant to 40 CFR 63.774(d)(1)(ii), the permittee shall keep records of the actual average benzene emissions calculations (in terms of benzene emissions per year) as determined using GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher.

#### **Specific Reporting Requirements:**

In order to demonstrate compliance with Condition 2.c., the permittee shall submit a notification to the Division's Frankfort and Regional offices providing the date when temporary units were removed from service. This notification shall be submitted within two weeks of removing the units from service and will include records of total operating hours for the temporary units.

#### 7. Specific Control Equipment Operating Conditions:

None

#### 8. <u>Alternate Operating Scenarios</u>:

None

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### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	<u>Description</u>	Generally Applicable Regulation
1.	1 Nine (9) storage vessels each having capacity less than 10,567 Gallons and containing compressor oil and organic liquids with vapor pressure less than 1.5 psia	None
2.	One (1) natural gas-fired emergency generator rated at 80 hp	None

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit shall be based on emissions and processing rates for any twelve (12) consecutive months.

- 2. Volatile organic compound, hazardous air pollutant (HAP), sulfur dioxide (SO<sub>2</sub>), and particulate emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. Source-wide Annual HAP Emissions Limitation:

The source-wide individual HAP emission shall be less than 9.0 tons per rolling 12 month period and combined HAPs emissions shall be less than 22.5 tons per rolling 12-month period.

#### **Compliance Demonstration Method:**

- Refer to Condition **1.a.** Operating Limitations for EG02.
- Refer to the compliance demonstration method to Condition 2.c. Emission Limitations for EG03.
- 4. In order to demonstrate compliance with 401 KAR 63:020, the permittee shall perform a screening modeling using U.S. EPA approved methodology and submit results to the Division within three (3) months of issuance of the draft permit to evaluate the impact of toxic air pollutants (formaldehyde).

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### SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. permittee shall perform a screening modeling using U.S. EPA approved methodology and submit results to the Division within three (3) months of issuance of the draft permit to evaluate the impact of toxic air pollutants.

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

g. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Hazard Regional Office 233 Birch Street, Suite 2 Hazard, KY 41701123 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

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#### **SECTION G - GENERAL PROVISIONS**

#### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in the permit and
  - (2) Non-applicable requirements expressly identified in this permit.

#### 2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

#### 3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points U05, U06 and U07 in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - (1) The date when construction commenced.
  - (2) The date of start-up of the affected facilities listed in this permit.
  - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### 5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

#### 6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

#### 7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

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#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(2) The permitted facility was at the time being properly operated;

- (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

#### 8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### 9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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### **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

### **SECTION I - COMPLIANCE SCHEDULE**

None